

**Notice of Allowability**

|                        |                   |  |
|------------------------|-------------------|--|
| Application No.        | Applicant(s)      |  |
| 09/907,904             | SEWARD, ROBERT Y. |  |
| Examiner               | Art Unit          |  |
| Wilbert L. Starks, Jr. | 2121              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to Amendment filed 05 August 2004.
2.  The allowed claim(s) is/are 1-20.
3.  The drawings filed on 19 July 2001 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some\*    c)  None    of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
    1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.  
(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
    Paper No./Mail Date \_\_\_\_\_.  
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

**DETAILED ACTION**

***Reasons For Allowance***

1. Claims 1-20 are allowed.

2. The following is an Examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fails to teach the claimed invention of genetically solving for an optimal integrated circuit layout, as claimed by applicant. Specifically, independent claims 1, 8, and 15 disclose a three-step process of a) creating separate populations, b) cross breeding the populations by combining parents from each population, and c) selecting second-generation solutions.

3. The closest prior art of Koza<sup>1</sup> teaches Genetic programming but fails to teach or suggest a three-step process of a) creating separate populations, b) cross breeding the populations by combining parents from each population, and c) selecting second-generation solutions. To the extent that this set of features is not found in the cited prior art, the present case is held to be allowable over the art of record by Examiner.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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<sup>1</sup> Koza, Genetically Breeding Populations of Computer Programs to Solve Problems in Artificial Intelligence, In Proceedings of the Second Int. Conference on Tools for AI, pages 819--827. IEEE Computer Society Press, 1990.

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (703) 305-0027.

Alternatively, inquiries may be directed to the following:

|                                 |                       |
|---------------------------------|-----------------------|
| <b>S. P. E. Anthony Knight</b>  | <b>(703) 308-3179</b> |
| <b>After-final (FAX)</b>        | <b>(703) 746-7238</b> |
| <b>Official (FAX)</b>           | <b>(703) 746-7239</b> |
| <b>Non-Official/Draft (FAX)</b> | <b>(703) 746-7240</b> |

WLS

29 October 2004

Wilbert L. Starks, Jr.  
Primary Examiner  
Art Unit - 2121

